



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/780,824

02/17/2004

Edward G. Tiedemann JR.

030525

3723

23696 7590 01/23/2009
QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

RIZK, SAMIR WADIE

ART UNIT

PAPER NUMBER

2112

NOTIFICATION DATE

DELIVERY MODE

01/23/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com
kascanla@qualcomm.com
nanm@qualcomm.com

Office Action Summary	Application No.	Applicant(s)	
	10/780,824	TIEDEMANN ET AL.	
	Examiner	Art Unit	
	SAM RIZK	2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 40-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23, 40-79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Response to the applicant's RCE dated 12/15/2008
- Claims 24-39 have been Cancelled
- Claims 1-23 and 40-79 have been submitted for examination
- Claims 1-23 and 40-79 have been rejected

RCE

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/15/2008 has been entered.

Claim Rejections - 35 USC § 101

1. In regard to claim 23, the Applicant's amendment does not overcome the rejection in the office action mailed on 9/18/2008. A method embodied in a computer readable medium does not tie the method claim tied to the product. The method claim must be tied to the product/thing and must be useful. Copied is the updated rejection of claim 23 under section 35 USC 101.
2. Claim 23 is rejected under 35 U.S.C. 101 because the claim invention is directed to non-statutory subject matter.

Art Unit: 2112

For Example, each limitation in the method claim 1 is pure a mental step or act, i.e. generating a first signal and conditionally generating a second signal for rate control method. Rate control what? To qualify under section 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which is tied and must be useful. See MPEP section 2106.1V.B and *in re Bilski* 88 USPQ2d 1385. and *In re Schrader*, 22F.3d 290, 295(Fed.Cir.1994).

3. Claims 40-53 and 64-79 are rejected for the same reasons as per claim 23.

Response to Arguments

4. Applicant's arguments with respect to claims 1-23 and 40-79 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7, 10, 12-23, 41, 46-64, 69-72, 76, 78 and 79 are rejected under 35

U.S.C. 102(e) as being Chung et al. US patent number 7,741,862 (Hereinafter Chung).

Art Unit: 2112

6. In regard to claim 1, Chung teaches:

- (Original) An apparatus, comprising:
- a message generator for:
- generating a first message comprising an acknowledgement indicator and a rate control indicator; and

(Flow chart 5, step (44) and col. 11, lines (35-45) in Chung)

- generating a second message conditioned on the rate control indicator.
(Flow chart 5, step (44) and col. 11, lines (35-45) wherein Chung generates the next (second) message based on the DRC indicator)

7. In regard to claim 2, Chung teaches:

(Original) The apparatus of claim 1, wherein the second message comprises a rate control command.

(Flow chart 5, step (44) and col. 11, lines (35-45) wherein Chung generates the next (second) message based on the DRC indicator)

8. In regard to claim 3, Chung teaches;

- (Original) The apparatus of claim 2, wherein the rate control command is one of a plurality of values, wherein one or more of the plurality of values indicates a rate increase.

(Flow chart 6, step (54) in Chung)

9. In regard to claim 4, Chung teaches:

Art Unit: 2112

- (Original) The apparatus of claim 2, wherein the rate control command is one of a plurality of values, wherein one or more of the plurality of values indicates a rate decrease.

(Flow chart 6, step (54) in Chung)

10. In regard to claim 5, Chung teaches:

- (Original) The apparatus of claim 2, wherein the rate control command is one of a plurality of values, wherein one or more of the plurality of values indicates a rate hold.

(Flow chart 6, step (54) in Chung)

11. In regard to claim 6, Chung teaches:

- (Original) An apparatus, comprising:
- a receiver for receiving a packet;
(Figure 2, ref. (32) in Chung)
- a decoder for decoding the received packet; and
(col. 2, lines (52-57) in Chung)
- a message generator for generating a first signal comprising one of a first plurality of values, each value associated with an acknowledgement (ACK) or negative acknowledgement (NAK), and one or more of the values indicating a rate control command; and

(Flow chart 5, step (44) and col. 11, lines (35-45) in Chung)

Art Unit: 2112

- conditionally generating a second signal comprising one of a second plurality of values corresponding to a respective plurality of rate control commands when the value of the first signal indicates a rate control command.

(Flow chart 5, step (44) and col. 11, lines (35-45) wherein Chung generates the next (second) message based on the DRC indicator)

12. In regard to claim 7, Chung teaches;

- (Previously Presented) The apparatus of claim 6, further comprising a transmitter for transmitting the first signal and conditionally transmitting the second signal.

(Figure 2, ref. (30) in Chung)

13. in regard to claim 10, Chung teaches:

- (Original) An apparatus, comprising:
- A receiver for receiving a first signal and conditionally receiving a second signal in accordance with a rate control indicator; and

(Flow chart 5, step (44) and col. 11, lines (35-45) wherein Chung generates the next (second) message based on the DRC indicator)

- a message decoder for decoding the rate control indicator from the received first signal.

(col. 2, lines (52-57) in Chung)

14. Claims 12, 18, 51, 76 are rejected for the same reasons as per claim 2.

15. Claims 13, 46 and 69 are rejected for the same reasons as per claim 3.

16. Claims 14, 47 and 70 are rejected for the same reasons as per claim 4.

17. Claims 15, 48, 49, 71 and 72 are rejected for the same reasons as per claim 5.

Art Unit: 2112

18. Claim 16 is rejected for the same reasons as per claim 7.
19. In regard to claim 17, Chung teaches:
 - (Original) The apparatus of claim 16, wherein the transmitter retransmits the packet when the first signal indicates the transmitted packet is not acknowledged.

(Flow chart 5, step (48) in Chung)
20. Claims 19, 21, 41, 56-60, 62 and 63 are rejected for the same reasons as per claim 1.
21. Claims 20 and 22 are rejected for the same reasons as per claim 10.
22. Claims 23, 40, 53, 55, 61, 64, 78 and 79 are rejected for the same reasons as per claim 6.
23. Claim 50, 52 and 53 are rejected for the same reasons as per claim 17.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 2112

2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
24. Claim 8, 9, 11, 42-45, 65-68, 73-75 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung as applied to claim 6 above, and further in view of Berrberry et al. US publication no. 2006/01284110 (Hereinafter Berrberry).
25. In regard to claim 8, Chung substantially teaches all the limitations in claim 6. However, Chung does not teach:
- (Original) The apparatus of claim 6, Wherein the receiver is further operable to receive one or more transmission requests and one or more autonomous transmissions, the apparatus further comprising a scheduler for allocating a shared resource in response to the one or more transmission requests and the one or more autonomous transmissions.
- Berrberry in an analogous art that teaches method and apparatus for switching mobile station between autonomous and scheduled transmissions teaches:
- (Original) The apparatus of claim 6, Wherein the receiver is further operable to receive one or more transmission requests and one or more autonomous transmissions, the apparatus further comprising a scheduler for allocating a shared resource in response to the one or more transmission requests and the one or more autonomous transmissions.
- (Figure 3 in Berrberry)

It would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 2112

invention was made to combine the teaching of Berrberry that comprise scheduler for switching mobile station between autonomous and scheduled transmissions. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized the need to define a procedure to accomplish a scheduled switching mode for transitioning a mobile station between the autonomous transmission mode and the scheduled transmission mode.

26. In regard to claim 9, Berrberry teaches:

- (Original) The apparatus of claim 8, wherein the message generator further generates a grant message in response to a transmission request in accordance with the allocation.

(section [0010] in Berrberry)

27. In regard to claim 11, Berrberry teaches:

- (Original) The apparatus of claim 10, wherein the first signal comprises an acknowledgement.

(section [0012] in Berrberry)

28. Claims 42, 44, 65 and 67 are rejected for the same reasons as per claim 11.

29. Claim 43, 66, 74, 75 and 77 are rejected for the same reasons as per claim 9.

30. In regard to claim 45, Berrberry teaches:

- (Original) The method of claim 41, wherein the first signal comprises a value indicating no transmission corresponding to a negative acknowledgement of the decoded packet and no rate control command.

(section [0011] in Berrberry)

31. Claim 68 is rejected for the same reasons as per claim 45.
32. Claim 73 is rejected for the same reasons as per claim 8.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Rizk whose telephone number is (571) 272-8191. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronics Business Center (EBC) at 866-217-9197 (toll-free)

/Sam Rizk/

Application/Control Number: 10/780,824

Page 11

Art Unit: 2112

Examiner, Art Unit 2112